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Serial No. 10/633,587

Docket No.: 1594.1286

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re the Application of:

Yoon-Young KIM et al.

Serial No. 10/633,587

Group Art Unit: 3744

Confirmation No. 4804

Filed: August 5, 2003

Examiner: Tapolcai, William E.

For: TIME DIVISION MULTI-CYCLE COOLING APPARATUS AND METHOD FOR  
CONTROLLING THE SAME

**RESPONSE TO RESTRICTION REQUIREMENT**

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

This is responsive to the Office Action mailed June 17, 2004, having a shortened period for response set to expire on July 17, 2004, the following remarks are provided.

I. Provisional Election of Claims Pursuant to 37 CFR §1.142

Applicants provisionally elect **Group I, claims 1-28** in response to the preliminary restriction requirement set forth in the Office Action.

II. Applicants Traverse the Requirement

Insofar as Groups II-VI are concerned, it is believed that claims 29-30, 31, 32-33, 34, and 35, respectively, are so closely related to elected claims 1-28 that they should remain in the same application. The elected claims 1-28 are directed to switching between two refrigerant circuits to respectively provide refrigerant to both of first and second evaporators or only the second evaporator. Claims 29-30 of Group II are drawn to two refrigerant circuits which respectively provide refrigerant to both first and second evaporators or only the second evaporator, the two refrigerant circuits sharing a pathway through a compressor, condenser, and the second evaporator. Claim 31 of Group III is drawn to two expanding units with different inside diameters, the two expanding units respectively depressurizing refrigerant for a refrigerator compartment evaporator and a freezer compartment evaporator. Claims 32-33 of

Group IV are drawn to a method of defrosting a refrigerator compartment by blowing moisture generated during the defrosting into the refrigerator compartment. Claim 34 of Group V is drawn to a method of defrosting a refrigerator compartment by operating a refrigerator compartment fan for a predetermined time immediately after an operation of a compressor has stopped. And claim 35 of Group VI is drawn a cooling apparatus comprising two refrigerant circuits to respectively provide refrigerant to a plurality of evaporators or bypass at least one of the plurality of evaporators. There have been no references cited to show any necessity for requiring restriction and, in fact, it is believed that the Examiner would find references containing all of the claims of the present application in the same field of technology. While it is noted that the Examiner has identified different classifications for the different groups of claims, it is believed that classification is not conclusive on the question of restriction. It is believed, moreover, that evaluation of all of the claims would not provide an undue burden upon the Examiner at this time in comparison with the additional expense and delay to the Applicants in having to protect the additional subject matter recited by the Groups II-VI claims by filing several divisional applications.

MPEP §803 sets forth the criteria for restriction between patentably distinct inventions. (A) indicates that the inventions must be independent (see MPEP §802.01, §806.04, §808.01) or distinct as claimed (see MPEP §806.05-806.05(i)); and (B) indicates that there must be a serious burden on the Examiner if restriction is required (see MPEP §803.02, §806.04(a)- §806.04(i), §808.01(a) and §808.02). The Examiner has not set forth why there would be a serious burden if restriction is required.

Even if the Examiner considers claim 31 of Group III, claims 32-33 of Group IV, and claim 34 of Group V to be a separate invention from claims 1-28 of Group I, the Applicants respectfully request the Examiner to consider claims 1-28 of Group I together with claims 29-30 of Group II and claim 35 of Group VI. The claims of all three of these groups (I, II, and VI) are drawn to two refrigerant circuits which respectively provide refrigerant to either a plurality of evaporators or less than the whole plurality of evaporators, and the Applicants respectfully submit that these claims are so closely related that it would be improper to impose a restriction upon these claims.

### III. Conclusion

Upon review of references involved in this field of technology, when considering that the Group II claims are directed to two refrigerant circuits which respectively provide refrigerant to

both first and second evaporators or only the second evaporator, the two refrigerant circuits sharing a pathway through a compressor, condenser, and the second evaporator; the Group III claim is directed to two expanding units with different inside diameters, the two expanding units respectively depressurizing refrigerant for a refrigerator compartment evaporator and a freezer compartment evaporator; the Group IV claims are directed to a method of defrosting a refrigerator compartment by blowing moisture generated during the defrosting into the refrigerator compartment; the Group V claim is directed to a method of defrosting a refrigerator compartment by operating a refrigerator compartment fan for a predetermined time immediately after an operation of a compressor has stopped; the Group VI claim is directed to a cooling apparatus comprising two refrigerant circuits to respectively provide refrigerant to a plurality of evaporators or bypass at least one of the plurality of evaporators; and elected claims 1-28 of Group I are directed to switching between two refrigerant circuits to respectively provide refrigerant to both of first and second evaporators or only the second evaporator, and when all of the other various facts are taken into consideration, it is believed that upon reconsideration of the Examiner's initial restriction requirement, all of the pending claims should be examined in the subject application.

In view of the foregoing arguments and remarks, all claims are deemed to be allowable and this application is believed to be in condition for allowance.

If any further fees are required in connection with the filing of this Amendment, please charge the same to our deposit account number 19-3935.

Should any questions remain unresolved, the Examiner is requested to telephone Applicants' attorney.

Respectfully submitted,

STAAS & HALSEY LLP

Date: 07/13/04

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